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PATENT

Attorney Docket No. A-67640-2/RFT/NBC

Dorsey File No. 468648-2217

1644

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

KIM et al.

Serial No.: 10/053,302

Filing Date: January 17, 2002

For: *Monoclonal antibodies to IFNAR2*

Examiner: UNKNOWN

Art Unit: 1644

P#5

CERTIFICATE OF MAILING

I hereby certify that this correspondence, including listed enclosures, is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on:

Dated: Dec 30, 2002

Signed: Marjorie Jost
Marjorie Jost

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, DC 20231

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the reference cited on the accompanying substitute for form PTO-1449. Since copies of these references were provided either by Applicants or the Examiner in the following related U.S. Application – Serial No. 09/166,298, filed October 5, 1998 (abandoned) – of which the instant application is a continuation and upon which the instant application relies for its priority date, in accordance with 37 C.F.R. § 1.98(d), no copies of these references are enclosed.

None of the foregoing references is believed to disclose the invention as claimed.

Nothing herein shall constitute an admission concerning the contents of any of the cited

Serial No.: 10/053,302
Filing Date: January 17, 2002

references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

As far as is known to the undersigned, this Information Disclosure Statement is being filed within three months of the filing date of a national application, within three months of the date of entry of the national state in an international application, or before the mailing date of a first Office Action on the merits as set forth in 37 C.F.R. § 1.97(b), and therefore no fee is required. While no fee is currently believed to be due, if this belief is in error, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2319 (Our Order No. 468648-2217 (A-67640-2/RFT/NBC)).

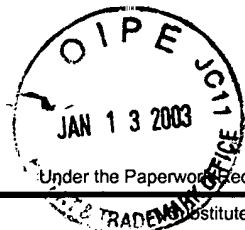
Please direct any calls in connection with this application to the undersigned at (415) 781-1989.

Respectfully submitted,
DORSEY & WHITNEY LLP

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Nancy B. Capps
Nancy B. Capps, Reg. No. 45,638 for
Richard F. Trecartin, Reg. No. 31,801
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		TECH CENTER 1600/2900		Complete if Known		
		Application Number		10/053,302		
		Filing Date		January 17, 2002		
		First Named Inventor		KIM, Kyung Jin		
		Group Art Unit		1644		
Examiner Name						
Sheet	1	of	3	Attorney Docket Number		A-67640-2/RFT/NBC (468648-2217)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	U.S. Patent Document Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	5,460,811	10/1995	Goeddel et al.	
	A2	5,516,515	05/1996	Vellucci et al.	
	A3				
	A4				
	A5				
	A6				
	A7				
	A8				
	A9				
	A10				
	A11				

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document Country Code ² Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	B1	EP 0 563 487	10/1993			
	B2	WO 93/20187	10/1993			
	B3	WO 95/07716	03/1995			
	B4	WO 97/41229	11/1997			
	B5					
	B6					

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ⁶
	C1	ABRAMOVICH et al., "Differential Tyrosine Phosphorylation of the IFNAR Chain of the Type I Interferon Receptor and of an Associated Surface Protein in Response to IFN- α and IFN β ," EMBO Journal, 13(24):5871-5877 (1994).				
	C2	ABRAMOVICH et al., "Human IFN- α Receptor Detected by Two Monoclonal Antibodies," J. Interferon Research, 12(supp. 1):S217 (Sept. 9 - Oct. 2, 1992 Annual Mtg., international Society for Interferon Res.) (1992).				
	C3	BENOIT, et al., "A Monoclonal Antibody to Recombinant Human IFN- β , and IFN-Omega," J. Immunol, 150:707-716 (1993).				
	C4	CAPON, et al., "Two Distinct Families of Human and Bovine Interferon - α Genes are Coordinately Expressed and Encode Functional Polypeptides," Molecular & Cellular Biology, 5:768-779 (1985).				
	C5	CHUNTHARAPAI, A. et al., "Determination of Residues Involved in Ligand Binding and Signal Transmission in the Human IFN- α Receptor 2," The Journal of Immunology, 163:766-773 (1999).				

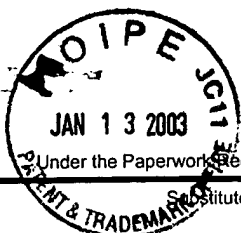
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First Named Inventor

KIM, Kyung Jin

Group Art Unit

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

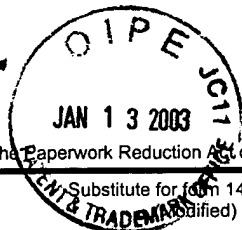
Examiner Initials ¹	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	C6	CHUNTHARAPAI, A. et al., "Structure-Function Studies of Human Interferon- α Receptor II Using Mabs" poster, presented at the 1996 Joint Meeting of the International Cytokine Society and the International Society for Interferon and Cytokine Research (October 6-10 1996).	
	C7	CHUNTHARAPAI, et al., "Structure-Function Studies of Human Interferon - α Receptor II Using Mabs," FASEB Journal, (Abst. #1877), 10(6):A1325, (April 30, 1996).	
	C8	CLEARY, et al., "Knockout and Reconstitution of a Functional Human Type I Interferon Receptor Complex," Journal of Biological Chemistry, 269(29):18747-18749 (1994).	
	C9	COHEN, "Ligand-Induced Association of the Type I Interferon Receptor Components," Mol. Cell Biol. 15:4208 (1995).	
	C10	COHEN, et al., "Cloning, Expression and Biological Activity of a New Variant of Human Interferon α Identified in Virus Induced Lymphoblastoid Cells," Dev. Biol. Standard, 60:111-122 (1995).	
	C11	COLAMONICI, et al., "Characterization of three Monoclonal Antibodies that Recognized the Interferon α 2 Receptor," Proc. Natl. Acad. Sci., 87:7230-7234 (1990).	
	C12	COLAMONICI et al., "Multichain Structure of the IFN - α Receptor on Hematopoietic Cells," J. Immunol., 148(7):2126-2132 (1992).	
	C13	COLAMONICI, et al., "Identification of a Novel Subunit of the Type I Interferon Receptor Localized to Human Chromosome 21," Journal of Biological Chemistry, 268(15):10895-10899 (1993).	
	C14	COLAMONICI, et al., "Study of the Structure of the IFN- α 2 Receptor by Anti-IFN α 2 Receptor Antibodies and Affinity Cross-Linking," J. Interferon Res., (Abst. 118-6, Annual Int. Society for Interferon Res. Mtg., Nov. 14-18, 1990). 10(Suppl. 1):S158.	
	C15	CONSTANTINESCU, et al., "Role of Interferon $\alpha\beta$ Receptor Chain 1 in the Structure and Transmembrane Signaling of the Interferon $\alpha\beta$ Receptor Complex," Proc. Natl. Acad. Sci., 91:9602-9606 (1994).	
	C16	CROZE et al., "The Human 'Type Interferon Receptor'," Journal of Biol. Chemistry, 271:33165-33168 (1996).	
	C17	DOMANSKI et al., "Cloning and Expression of a Long Form of the β Subunit of the Interferon $\alpha\beta$ Receptor that is Required for Signaling," Journal of Biol. Chemistry, 270(37):21606-21611 (1995).	
	C18	DOMANSKI et al., "The Type-I Interferon Receptor. The Long and Short of it," Cytokine and Growth Factor Rev., 7:143-151 (1996).	
	C19	EID & TOVEY, "Characterization of a Domain of a Human Type I Interferon Receptor Protein Involved in Ligand Binding," J. Interferon & Cytokine Res., 15:205-211 (1995).	
	C20	GOEDDEL et al., "The Structure of Eight Distinct Cloned Human Leukocyte Interferon cDNAs," Nature, 290:20-26 (1981).	
	C21	HAUPTMANN et al., "A Novel Class of Human Type I Interferons," Nucleic Acids Research, 13(13):4739-4749 (1985).	
	C22	LIEBERT, "Nomenclature of the Human Interferon Genes," J. Interferon Research, 13:443-444 (1993).	
	C23	LING et al., "Human Type I Interferon Receptor, IFNAR, is a Heavily Glycosylated 120-130 kD Membrane Protein," J. Interferon & Cytokine Res., 15:56-61 (1995).	
	C24	LU et al., "Structure-Function Studies of IFN- α R Using Mabs Binding to Different Epitopes," 9th International Congress of Immunology, (July 23-29, 1995) Abst. 713:121 (1995).	
	C25	LU et al., "Structure-Function Study of the Extracellular Domain of the Human IFN- α Receptor (hIFNAR1) Using Blocking Monoclonal Antibodies: The Role of Domains 1 and 2," The Journal of Immunology, 160:1782-1788 (1998).	

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet 3 of 3

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	C26	MULLER et al., "Functional Role of Type I and Type II Interferon in Antiviral Defense," Science, 264:1918-1921 (1994).	
	C27	NAVARRO et al., "Immunohistochemical Detection of the Type I Interferon Receptor in Human Fetal, Adult, and Neoplastic Tissues," Modern Pathol., 9:150-156 (1996).	
	C28	NOVICK et al., "Antibodies to IFN- α Receptor," J. Interferon Research, (Nov. 3-8, 1991 Annual Mtg., International Society for Interferon Research) 11 (Supp. 1): s203 (1991).	
	C29	NOVICK et al., "Monoclonal Antibodies to the Human IFN- α Receptor: Blocking of the Biological Activities of IFN- α and Purification of the Receptor," J. Interferon Res., (Abst. P3-6, Nov. 14-18, 1988 Annual Mtg., International Society for Interferon Res.) 8(Supp. 1):s93 (1988).	
	C30	NOVICK et al., "The Human Interferon $\alpha\beta$ Receptor: Characterization and Molecular Cloning," Cell, 77:391-400 (1994).	
	C31	PLATANIAS et al., "Differences in Interferon α and β Signaling," Journal of Biological Chemistry, 271:23630-23633 (1996).	
	C32	ROSELEN et al., "Detection of Functional Interferon Alpha Receptors in Human Neuroendocrine Tumor Cell Lines Using a New Monoclonal Antibody," Eur. Cytokine Netw., 3(2):81-88 (1992).	
	C33	RUSSELL-HARDE et al., "Baculovirus Expression of the Human Interferon α/β Receptor and Characterization Using Monoclonal Antibodies," J. Interferon Res., (Poster Presentation 2: Receptors, Abst. PW2-1, Annual Mtg. of ISICR on the Inte.) 13(Suppl. 1): s78 (1993).	
	C34	RUSSELL-HARDE et al., "Reconstitution of a High Affinity Binding Site for Type I Interferons," Journal of Biol. Chemistry, 270(44):26033-26036 (1995).	
	C35	SAGAWA et al., "Identification of the Monoclonal Antibody Recognizing Receptor(s) for Interferon-alpha, -beta, or -gamma," Tissue Antigens., (4th International Conference on Human Leukocyte Differ. Antigens) 33(2):331 (1989).	
	C36	SHELLEKENS et al., "Factors inhibiting IFN activity," Biother., 8:199-204 (1996).	
	C37	SCOTT et al., "Production of Antibody to Human Interferon-Alpha Receptor Proteins," Hybridoma (abstract only) 5(1):81 (1986).	
	C38	TANIGUCHI et al., "Construction and Identification of a Bacterial Plasmid Containing the Human Fibroblast Interferon Gene Sequence," Proc. Japan Acad., 55(Ser. B):464-469 (1979).	
	C39	TANIGUCHI et al., "The Nucleotide Sequence of Human Fibroblast Interferon cDNA," Gene, 10:11-15 (1980).	
	C40	TOVEY et al., "Role of the Type I Interferon in Allograft Rejection," J. Leukocyte Biol., 59:512-517 (1996).	
	C41	UZE et al., "Genetic Transfer of a Functional Human Interferon α Receptor into Mouse Cells: Cloning and Expression of its cDNA," Cell, 60:225-234 (1990).	
	C42	UZE et al., "Murine Tumor Cells Expressing the Gene for the Human Interferon $\alpha\beta$ Receptor Elicit Antibodies in Syngeneic Mice to the Active Form of the Receptor," European Journal of Immunology, 21:447-451 (1991).	
	C43	WEISSMANN, et al., "The Interferon Genes," Progress in Nucleic Acid Research & Molecular Biology, Academic Press Vol. 33:251-300 (1986).	
	C44		
	C45		

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